

# Protocol for integrating experiments

1. Unfreeze the protein solutions (Solution A : triple SpyTag-SUP, 5mg/mL; Solution B: triple SpyTag-mSA, 5mg/mL; Solution C: triple SpyCatcher, 5mg/mL).
2. Mix Solution A, B and C at the volume ratio of 1:1:2 and let the mixture stand for 1 hour.
3. Add the mixture into the polluted water to ensure the concentration of triple SpyTag-SUP is equal to uranyl ion.
4. Shake it for 1 min.
5. Add magnetic beads solution whose volume is one fifth of the volume of protein solution into the reaction system.
6. Shake it for 1 hour.
7. Use the magnetic frame to absorb magnetic beads. Measure the remaining uranyl concentration of supernatants by Arsenazo III assay.